Difficult to control asthma in the EGEA2 study
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Introduction
Many French asthmatics still have uncontrolled asthma which may result from inadequate or lack of compliance to treatment, or difficult to control asthma. The aim of this study was to compare phenotypic characteristics and asthma management in uncontrolled asthmatics according to the treatment adequacy (no/low vs high treatment).

Methods
The study was conducted in 406 asthmatics recruited in the EGEA study (Epidemiological study on the Genetics and Environment of Asthma) and participating to the follow-up (EGEA2). Asthma control was assessed from survey questions and lung function, adapted from the 2006 GINA guidelines. High treatment level was defined with daily use of inhaled corticosteroids >500 µg equivalent beclomethasone with long acting beta2-agonists, and/or oral corticosteroids in the past 3 months.

Results
Among the 227 (56%) uncontrolled asthmatics (120 partly-controlled), 71 (31%) had a high level of treatment. Compared to uncontrolled asthmatics with low treatment, those with high treatment did not differ by sex and smoking, but were 10 years older (p<0.0001), had more often adult-onset asthma (46.5% vs 28.2%, p=0.007), had lower FEV₁%predicted (75.5±21.3 vs 87.7±19.3, p<0.0001) and reported more often regular medical visits in the last 12 months (72.9% vs 21.8%, p<0.0001, among whom 80.4% vs 64.7% with a respiratory specialist, p=0.03).

Conclusion
In the EGEA study, a majority of asthmatics was uncontrolled despite adequate treatment in one third of the subjects. In this cross-sectional analysis, uncontrolled asthmatics with high treatment had significant lower FEV₁ compared to those with no/low treatment. Further longitudinal analyses will be conducted to assess the long term effect of asthma treatment.